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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,050	01/14/2004	Daniel T. Wallace	017516-009410US	5107

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EXAMINER

GIBSON, ROY DEAN

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/758,050

Applicant(s)

WALLACE ET AL.

Examiner

Roy D. Gibson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-22, 25-27 and 29 is/are rejected.
- 7) ☐ Claim(s) 23, 24 and 28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/1/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir., 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,699,235. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are merely broader in scope.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 10-11, 20-22, 25-27 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Ballantyne et al. (5,740,699).

As to claim 1, Ballantyne et al. disclose a wrist joint (surgical tool) which is horizontally extendable comprising a distal member configured to support an end effector, wherein the distal member has a base (plate 14); and

a plurality of rods (16) movable generally along an axial direction to adjust an orientation of the distal member with respect to the axial direction, wherein the rods are rotatably connected to the base (a ball joint or U-joint) and extend generally along the axial direction and wherein advancement or retraction of a first rod generally along the axial direction (via a linear actuator) tips the base through a first angle so that the distal member faces a first articulated direction (Figures 1 and 3, col. 2, lines 18-67 and col. 4, lines 24-51).

As to claims 2-4, the first angle can inherently be greater than 30-70 degrees (Figure 1).

As to claims 5-7, Ballantyne et al. further disclose wherein advancement or retraction of a second rod generally along the axial direction tips the base through a second angle so that the distal member faces a second articulated direction; wherein the second angle can inherently be greater than approximately 30 degrees; and wherein the plurality of rods comprise three rods (Figures 1 and 3, col. 2, lines 18-67 and col. 4, lines 24-51).

As to claims 10-11, Ballantyne et al. further disclose a plurality of linkages (Figure 3, U-Joints) each linkage connecting one of the plurality of rods with the base and wherein the linkage comprises an orthogonal linkage having a first link portion which is rotatably connectable with the one of the plurality of rods and a second link

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portion which is rotatably connectable with the base and wherein the first link portion and the second link portion lie in orthogonal planes (col. 3, lines 9-40).

As to claims 20-22, Ballantyne et al. further disclose a method of actuating a robotic surgical tool comprising:

providing a robotic surgical tool comprising a wrist including a distal member coupleable with a surgical end effector and having a base, and a plurality of rods rotatably connected to the base and extending along an axial direction;

actuating the wrist by manipulating a first rod of the plurality of rods to tip the base through a first angle so that the distal member faces a first articulated direction; and wherein manipulating comprises advancing or retracting (Figures 1 and 3, col. 2, lines 18-67 and col. 4, lines 24-51).

As to claims 25-27, Ballantyne et al. further disclose wherein actuating the wrist further comprises manipulating a second rod of the plurality of rods to tip the base through a second angle so that the distal member faces a second articulated direction; wherein advancing or retracting comprises rotating a second rotational actuation member (linear actuator) to which the second rod is attached, and further comprising actuating the wrist by rotating the plurality of rods around a central axis parallel to the axial direction to rotate the base (Figure 3 and col. 4, lines 24-51).

As to claim 29, Ballantyne et al. further inherently disclose coupling the end effector to the base and actuating the end effector (col. 2, lines 44-53).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ballantyne et al. in view of Akeel (6,425,177). Ballantyne et al. disclose three rods, but Akeel disclose a similar positioner with up to six rods for positioning an object (Figure 5 and col. 8, line 33-col. 9, line 7). Therefore, the examiner maintains that it would have been obvious to a skillful artisan to configure the wrist tool with four rods as well wherein the first and second rods are adjacent to each other.

***Allowable Subject Matter***

Claims 23, 24 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roy D. Gibson whose telephone number is 571-272-4767. The examiner can normally be reached on M-F, 7:30 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roy D. Gibson  
Primary Examiner  
Art Unit 3739

June 6, 2005